The writer states that although the dark urine of indicanuria is not of infrequent occurrence, it is not so well recognized as it should be. He believes that many cases are mistaken for other conditions, and particularly for melanuria. The color is not due to the indigo pigments nor to indoxyl sulphates, which are colorless substances, but, as Baumann and Brieger showed, to higher oxidation products of indol. These urines blacken when warmed with nitric acid, but there is no such immediate blackening in the cold, as with true melanuria. They do not blacken with ferric chloride, and by this test they may be at once distinguished from those containing melanogen. Any morbid process which leads to abundant excretion of indican may give rise to such urine, as, for example, intestinal obstruction from any cause, excessive bacterial activity in the intestine, or putrefactive changes in collections of pus.

SURGERY.

UNDER THE CHARGE OF

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The Significance of the Zoological Distribution, the Nature of the Mitoses, and the Transmissibility of Cancer.—Bashford and Murray (*The Lancet*, February 13, 1904) state that within the past year specimens of malignant new-growths have accumulated from all the domesticated animals and from many other vertebrates. The clinical, pathological, anatomical, and microscopic characters of these new-growths are identical with those found in man in all essential features, although the animals themselves are drawn from the different classes of the vertebrate phylum. Stated generally, it may be said that malignant new-growths are frequent according as animals are carefully examined, and are unrecorded in forms which are difficult to examine or do not reach old age in considerable numbers. The figures are not sufficiently extensive to determine accurately the age incidence of the various types of new-growths in different animals, but a relatively higher incidence in old age is apparent.

In regard to the phenomena of cell division in malignant new-growths the following points are of great importance: A complicated sequence of cell changes has been found to be characteristic of carcinoma and sarcoma alike. This sequence is the same as that which initiates the origin of the sexual generation in plants from the asexual, and is terminal in the history of the sexual cells in animals. It must be noted also that all the cells of the malignant new-growths do not undergo the reducing division; a certain number differentiate in the direction of the tissue among which they have arisen, and in the secondary growths, when present, somatic mitoses occur in the growing margin, which, it will subsequently be shown, is also a feature in the growth of cancer when transferred to a new host.

The transmission of cancer from man to animals, or from one animal to another of a different species, has never been successfully performed. Successful transplantation experiments have been made, however, from animals suffering from malignant new-growths to others of the same species. Careful microscopic examination has clearly demonstrated that the new tumors which develop arise from the actual cells introduced. Transplantation is, in fact, identical with the process of metastasis, as it occurs in the individual providing the tumor. It is remarkable, however, that the tumor used in these experiments does not produce metastases naturally, and its malignancy is only evidenced by its progressive growth and the undifferentiated character of the cells. The process is in no sense an infection, the tissues of the new host not participating in the formation of the new parenchyma. The origin of the stroma has not been accurately determined. The experimental transmission of carcinoma shows that we must distinguish between the problem of the genesis of a malignant new-growth and that of the conditions which permit of its continued existence.

The wide zoological distribution of malignant new-growths—its limits are not yet determined—indicates that the cause of cancer is to be sought in a disturbance of those phenomena of reproduction and cell life which are common to the forms in which it occurs. Our observations on animals show that malignant new-growths are always local in origin and of themselves produce no evident constitutional disturbances whatsoever. These facts are in full accord with accumulated clinical experience in man. In connection with diagnosis and statistics one must emphasize the importance of the absence of specific symptoms. The evidence we have advanced that cancer is an irregular and localized manifestation of a process otherwise natural to the life cycle of all organisms probably explains why it is that malignant new-growths, and their extensive secondary deposits *qua* cancer, are devoid of a specific symptomatology.

Remarks on Extensive Carcinoma of the Œsophagus, with Unusual Nervous Complications.—SAUNDBY and HEWETSON (*British Medical Journal,* March 12, 1904), after reporting in detail this case, state that it is of special interest because it appears to constitute an exception to "Simon's Law": The occurrence of an isolated paralysis of the abductor filaments of the recurrent laryngeal nerve in cases in which the roots or trunks of the spinal accessory, pneumogastric, and recurrent nerves are injured or diseased is not an isolated pathological curiosity. There is a distinct proclivity of the abductor fibres to become affected in such cases, either at an earlier period than the adductor fibres or even exclusively." In this case, both physiologically and pathologically, the adductor disablement was earlier and more intense in degree than the abductor. The clinical evidence showed that this adductor paralysis was an early and constant feature of the laryngeal condition during the whole of the patient's life in hospital. The abductor muscles, on the other hand, appeared to act well until a few days before death, when a slight narrowing of the previously wide-open glottis was noticed.